

Engineering Change Notice (ECN)

Purpose: This Engineering Change Notification (ECN) is to provide notification to PHYTEC customers of component, process or other relevant engineering changes on a PHYTEC hardware subassembly. Impact, qualification, validation and approval of this change shall be documented on the corresponding Customer-Specific Modification (KSM/KSP) form for the PHYTEC hardware subassembly

Notice Date: September 04 2013	ECN #: ECN-999-02-2013
Date of Change: KW37 2013	New Product Version: A1
PHYTEC Subassembly: phyCORE-AM335x	
PHYTEC Subassembly Part #: PCM-051-0005060I.A0, PCM-051-0005060C.A0, PCM-051-01041E0I.A0, PCM-051-02002E0I.A0, PCM-051-02041E0I.A0, PCM-051-12102F0C.A0, PCM-051-12102F0I.A0, PCM-051-22151F0C.A0, PCM-051-23102F0I.A0, PCM-051-24102F0I.A0	
New PHYTEC Part #: PCM-051-XXXXXXXX.A1 (New subassembly's can be identified via attached version number)	

Engineering Change (Component, Firmware, Process, other)

Current Part		New Part
ICXXX	PHYTEC Internal Part #	ICXXX
Texas Instruments	Manufacturer	Texas Instruments
AM335XZCZXXX	Manufacturer Part #	AM335XB(A)ZCZXXX
AM335x Rev.1	Description	AM335x Rev.2.x

Engineering Change Details

Reason for Component Change:

Controller : New Silicon Revision Release of AM335x (Rev.2.x) by manufacturer Texas Instruments, because of improved features and performance

Referenced Component Documents:

Sitara™ AM335x ARM® Cortex™-A8 SPRZ360E – October 2011 – Revised April 2013
Microprocessors (MPUs)
Silicon Revisions 2.1, 2.0, 1.0
Silicon Errata

<http://www.ti.com/general/docs/lit/getliterature.tsp?literatureNumber=sprz360e&fileType=pdf>

Impact of Change

- (1) Impact in function, due to different device ID and clock settings for OPP Modes

Measures taken by PHYTEC

- (1) Prototype Production for HW and SW validation of Rev. 2.x
- (2) HW validation of Rev. 2.x: HW design, temperature, Emc
- (3) SW validation of Rev. 2.x: timing for peripheral devices (RAM, NAND, etc.), OPP states
- (4) Adapting WinCE BSP to new silicon revision:
 - AM335x Rev. 2.x will be supported in BSP Version PD13.3.0 released in week 38. The new BSP will support the new OPP states of the Rev. 2.x.
- (5) Adapting Linux BSP to new silicon revision:
- (6) Linux BSP: AM335x Rev. 2.x will be supported in BSP Version PD13.1.0 released in KW37. The new BSP will support the new OPP states of the Rev 2.x and the Linux Kernel is based on the TI AM335x-PSP 04.06.00.11. Further information can be found in the release notes of the PD13.1.0 BSP.

Recommended measures for Customer

- (1) Accommodate different device ID and clock settings for OPP modes in software. (Linux patches are provided by TI)
- (2) Update operation system to newest BSP version, provided by PHYTEC.